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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,337	04/02/2001	Masatoshi Ohtsubo	35.C15275	1721

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EXAMINER	
PAYNE, DAVID C	
ART UNIT	**PAPER NUMBER**
2633	

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/822,337	OHTSUBO, MASATOSHI	
	Examiner	Art Unit	
	David C. Payne	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 5-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 September 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings were received on 14 September 2004. These drawings are acceptable.

Response to Arguments

2. Applicant's arguments, see pp. 5-7 of Amendment filed 14 September 2004, with respect to the rejection(s)of claim(s) 1-3 and 5-7 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Degura US 6,493,122 B1 (Degura).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

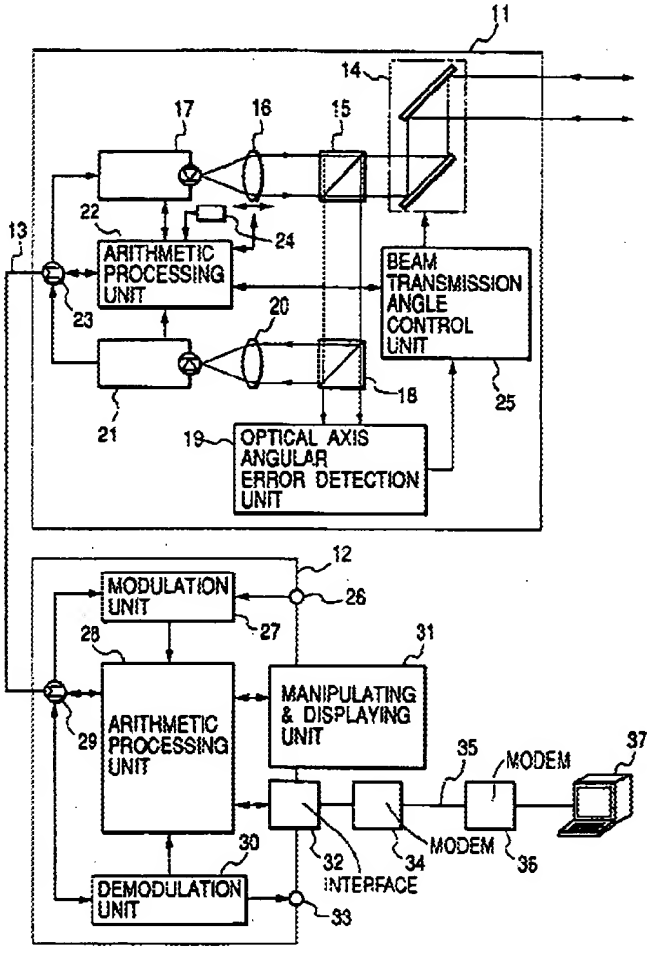
> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Degura US 6,493,122 B1 (Degura).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Re claim 1, Degura disclosed

FIG. 3



An optical space transmitter comprising:

a light source (17 of Figure 3) for emitting a light beam modulated according to a signal to be transmitted;

an optical system for sending out the light beam emitted from said light source as a transmission light beam with an angle of expansion;

a temperature detector for detecting the internal temperature of said optical space transmitter (24 of Figure 3, col./line: 3/30-35);

control means for controlling said optical said optical space transmitter such that the angle of expansion increases when the internal temperature detected by said temperature detector rises* (col./line: 4/18-26); and

angle correcting means for correcting the angular displacement between the light beam to be transmitted and a received light beam (col./line: 4/18-26).

*It is inherent that lasers produce more power after heating up and conversely give off less power when cooled down. In conjunction with these power changes, the angle of expansion is proportional to the power. That is, as temperature increases, power increases lead to a natural increase in the angle of expansion. Likewise a fall in temperature leads to a decrease in the angle of expansion.

Re claim 2, Degura disclosed

An optical space transmitter wherein said control means includes a computing circuit (22 of Figure 3) for determining by computation an appropriate angle of expansion of the light beam to be transmitted on the basis of the temperature detected by said temperature detector and a drive means (25 of Figure 3) for driving at least part of said optical system in the direction of the optical axis according to the outcome of

the computation of the computing circuit (col./line: 4/28-28).

Re claim 3, Degura disclosed

An optical space transmitter further comprising: light receiving (21 of Figure 3) means for converting a reception signal transmitted from another device and taken into said optical space transmitter so as to make the optical axis thereof agree with the optical axis of the light beam to be transmitted into an electric signal (col./line: 4/7-15).

Re claim 5, Degura disclosed

An optical space transmitter wherein said angle correcting means has a tracking mirror (14 of Figure 3) arranged on the optical path of the light beam to be transmitted and the received light beam and an actuator (25 of Figure 3) for changing the angle of the tracking mirror.

Re claim 6, Degura disclosed

An optical space transmitter wherein said optical system includes a beam splitter (15 of Figure 3) for separating the received light beam from the light beam to be transmitted and a half mirror (18 of Figure 3) for dividing the received light beam separated by the beam splitter into two light beams, said light receiving means includes a first photodetector (21 of Figure 3) for receiving one of the two light beams produced by said half mirror by dividing the incoming light beam and detecting it as main signal and a second photodetector (19 of Figure 3) for receiving the other light beam to be transmitted and the received light beam, and said actuator is adapted to change the angle of the tracking mirror according to the signal

of said photodetector.

Re claim 7, Degura disclosed

An optical space transmitter wherein said control means controls the device such that the angle of expansion decreases when the internal temperature detected by said temperature detector falls* (col./line: 4/18-26).

*It is inherent that lasers produce more power after heating up and conversely give off less power when cooled down. In conjunction with these power changes, the angle of expansion is proportional to the power. That is, as temperature increases, power increases lead to a natural increase in the angle of expansion. Likewise a fall in temperature leads to a decrease in the angle of expansion.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp

HANH PHAN
PRIMARY EXAMINER